

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1. (Currently Amended) An apparatus for testing data paths and/or video sources on an integrated circuit, comprising:

a switching device configured to couple one or more video sources to one or more destinations, the switching device including a plurality of input and output ports, each input port being connectable to one of (i) a single one of the output ports, (ii) a plurality of the output ports simultaneously, and (iii) all of the output ports simultaneously, via primary data-paths, the switching device including only one testing output data path dynamically configurable to couple to only one of the primary data-paths;

wherein the one testing output data-path is dedicated to cyclic redundancy checksum (CRC) output data; and

wherein a CRC module is configured to receive video testing output data directly from the one testing output data-path and to perform ~~uninterrupted~~ CRC testing of the video testing output data without interrupting simultaneous provision of the one or more video sources to the one or more destinations; and

a controller connectable to the switching device via the one testing output data path to (i) connect the only one primary data path to a data collection device and (ii) permit analysis of at least one from the group including (a) one or more of the primary data paths and (b) one or more of the video sources, via the connected only one primary data-path;

wherein the permitted analysis is based only on data received at the testing output data-path through the only one primary data path and the apparatus of claim.

2. (Original) The apparatus of claim 1, wherein the switching device includes video cross-bar devices.

3. (Canceled)

4. (Original) The apparatus of claim 1, wherein the analysis includes CRC checksum checking.

5. (Original) The apparatus of claim 1, wherein data collection device is a CRC module.

6. (Currently Amended) An apparatus comprising:

a first switching device having a plurality of first input and output ports coupled together via first internal paths, each first input port being connectable to one of (i) a single one of the first output ports, (ii) a plurality of the first output ports simultaneously, and (iii) all of the first output ports simultaneously;

at least a second switching device including an input side having a plurality of second input ports and an output side having a plurality of second output ports, the second input and output ports being coupled together via second data paths, the first output ports being connected to corresponding ones of the second input ports, the second switching device including one testing output data path;

wherein the one testing output data path is dynamically configurable to permit monitoring of only one from the group including (i) only a selected one of the first input

and output ports, (ii) only a selected one of the first data paths, (iii) only a selected one of the second input and output ports, and (iv) only a selected one of the second data paths;

wherein the one testing output data-path is dedicated to cyclic redundancy checksum (CRC) output data; and

wherein a CRC module is configured to receive testing output data directly from the one testing output data-path and to perform ~~uninterrupted~~ CRC testing of the video testing output data without interrupting simultaneous provision of the one or more video sources to the one or more destinations; and

a controller connectable to the second switching device via the one testing output data path to (i) connect the only one first or second data path or a selected pair of a first data path and a second data path to a data collection device and (ii) permit analysis of at least one from the group including (a) one or more of the data paths and (b) one or more of the video sources, via the connected only one data;

wherein the permitted analysis is based only on data received at the one testing output data path through the only one of the selected (i) first input and output ports, (ii) first data path, (iii) second input and output ports, and (iv) second data paths.

7. (Previously Presented) The apparatus of claim 6, further comprising a data collection device configured for coupling to the one testing output data path.

8. (Original) The apparatus of claim 7, wherein the data collection device is a cyclic redundancy check (CRC) module.

9. (Original) The apparatus of claim 8, wherein the monitoring includes CRC checksum checking of internal states of devices coupled to one or more of the first and second input and output ports.

10. (Previously Presented) The apparatus of claim 9, further comprising one or more scaling devices connected between selected ones of the first output ports and the second input ports, wherein the testing output port facilitates CRC checksum checking of the one or more scaling devices.